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Contents





## Letters to the Editor

***CPA Expert*** **encourages readers to write letters on issues related to business valuation and litigation and dispute resolution services and on published articles. Please include your name and telephone and fax numbers. Send your letters by e-mail to wmoran@aicpa.org.**



# COMPUTING THE GROWTH RATE IN PHYSICIAN PRACTICE REVENUE

*The Most Common Mistake in Medical Practice Valuation's Zero-Sum Game*

By Mark O. Dietrich, CPA/ABV

Whether forecasting future cashflows for a Discounted Cash Flow (DCF) model or estimating terminal growth for use in determining a capitalization rate, one of the most critical judgments a valuation analyst makes is deciding the growth rate in revenue and free cash flow to invested capital or cash flow to equity. Overestimating the growth rate is probably the most common mistake in the valuation of physician practices and other healthcare entities dependent upon the Resource Based Relative Value Scale (RBRVS) and the Healthcare Common Procedure Coding System (HCPCS) including Current Procedural Terminology (CPT).[1] The other entities include imaging centers, laboratories, and certain diagnostic facilities. In addition to physicians, physical and occupational therapists, podiatrists, and chiropractors are also included.

Revenue Growth consists, of course, of at least two components: growth in the *number* of *units* of services provided and growth in the *price per unit* of service. A valuation analyst should assess both of these in developing a forecast. *Number* of units depends upon the work capacity of the providers (physicians, nurse practitioners, physician assistants, etc.) in the practice, the demand for their services, competitors, the capacity of the physical facility, and a host of other factors. *Price* per unit in medicine, unlike many other areas of the economy, is principally based upon fees set by the government and third party insurers such as HMOs and is outside the control of the practice and of consumers.[2]

### PRICE PER UNIT

Generically, the Medicare program is providing physicians with a fee increase of 1.5% in 2005. This is a result of specific legislation overturning a scheduled decrease of 4.5% based upon the statutory formula which determines the annual fee change. It is important to understand that the statutory formula is still in place; the legislation only overturned the result for 2005. Future cuts are estimated at between 3.5% and 5.0% per annum in the absence of further legislation.

Fee increases are measured in the Medicare Conversion Factor, which is applied to the Relative Value Units (RVUs)[3] assigned to each procedure or service performed by physicians. Medicare fees per RVU have

1 CPT Codes are © the American Medical Association.

2 Exceptions include services not covered by insurance such as cosmetic plastic surgery or LASIK eye surgery.

3 RVUs in physician billing are analogous to hours in an accounting firm: the more RVUs performed, the higher the fee. Unlike hourly billing rates, which can vary, the RVU rate is usually fixed. More complex work is assigned a higher number of RVUs rather than a higher billing rate.

increased only 3.3% in 7 years (see figure 1 below). Although part of this annual fee increase computation involves a complex analysis of the increases in physician practice costs from inflation and other factors, the key to understanding the annual Update Adjustment Factor, is that it is designed "to reflect success or failure in meeting the *expenditure target* that the law refers to as 'allowed expenditures.'" These allowed expenditures are an aggregate amount (see table 1) equal to actual expenditures in a base period updated each year by the Sustainable Growth Rate or SGR.

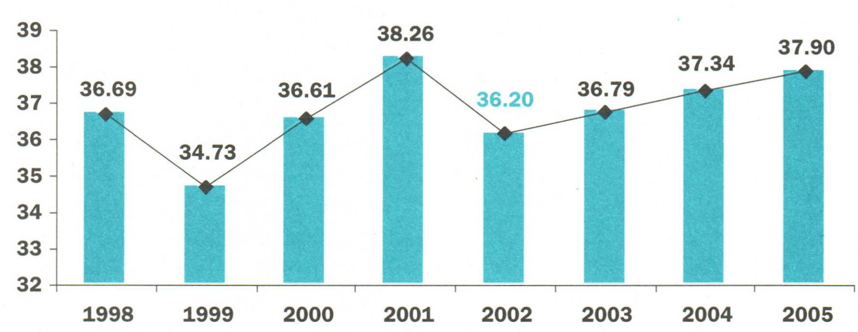
Table 1 shows the estimated payments in $1,000s by Medicare to various physician specialties during 2005, along with the changes in the aggregate RVUs for each of those specialties. Reductions in RVUs indicate that the services provided by those specialties have been devalued, while increases indicate that services have been revalued upwards. Basically, ophthalmologists pay more than $45 million out of their collective pockets to subsidize increases in payments to specialties such as interventional radiology, pathology and vascular surgery. Also on the losing side of the zero-sum game are Physical and Occupational Therapists.

**Table 1: Medicare's Zero-Sum Game**

| | Payments | RVU change | Dollars |
|---|---|---|---|
| Interventional radiology | 191,000 | 3.00% | 5,730 |
| Ophthalmology | 4,566,000 | –1.00% | (45,660) |
| Pathology | 846,000 | 2.00% | 16,920 |
| Vascular surgery | 487,000 | 4.00% | 19,480 |
| Nurse practitioners | 556,000 | –1.00% | (5,560) |
| Physical & occupational therapy | 998,000 | –2.00% | (19,960) |
| Lab | 452,000 | 6.00% | 27,120 |
| Diagnostic facilities | 879,000 | 2.00% | 17,580 |
| Chiropractors | 658,000 | –1.00% | (6,580) |
| All others | 56,170,000 | –0.02% | (9,070) |
| Total | 65,803,000 | –0.00% | 0 |

Interventional radiology is a relatively new specialty in the world of physician practices. Historically, radiologists "read films" and did not perform procedures. Now, newly graduated residents and re-trained radiologists are performing increasingly complex procedures, some of which require skills comparable to those of surgeons. As new procedures are developed, RVUs are assigned to them. Because the overall level of spending on physician services by Medicare is set by formula each year (as shown in table 1, the allowance for 2005 is $65.8 billion) as new procedures are added and valued, old procedures must be *de*valued!

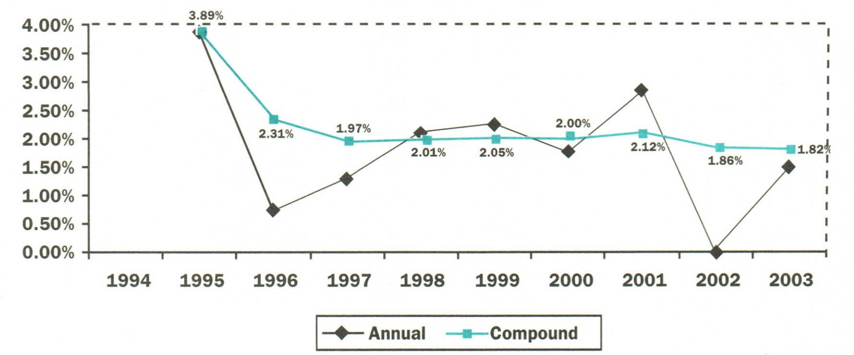
**Figure 1: Medicare Conversion Factor**




## PRODUCER PRICE INDEX

The *Producer Price Index (PPI)* program measures the average change over time in the selling prices *received* by domestic producers for their output. Fee-for-service reim-

**Figure 2: BLS PPI-Physician Services, Annual**




bursement as represented by the Producer Price Index for physician services has a compound rate of increase of 1.82% for the last nine years with 1994 as the base year; the annual rate has remained in the vicinity of 2.0% throughout this period. Physician practice costs tend to go up by more than the rate of inflation—a rate greater than 3%. Thus, profit margins are under constant erosion.

This empirical data reflects the general lack of negotiating clout in the physician community due to the large market shares held by major HMOs in densely populated metropolitan market areas, where most of the insured population resides. The Federal Trade Commission and Department of Justice anti-trust divisions have intervened repeatedly against physicians undertaking collective negotiating to counter the monopolistic or oligopolistic power of HMOs in these markets.

External evidence of annual fee increases, such as those found in Bureau of Labor Statistics (BLS) Consumer Price data[4] or press reports, will include the effect of the so-called cost-shifting phenomenon. This phenomenon causes the stated charge for a particular service to be significantly in excess of what is actually paid for that service—unless you happen to be uninsured. The uninsured include the poor and those unable to obtain insurance, as well as those who choose not to have health insurance to avoid the cost, gambling they will not need the coverage.

**Table 2: Year 1 Revenue**

| Insurance Coverage | Units | Charge per unit | Payment per unit | Collection rate | Net Revenue |
|---|---|---|---|---|---|
| Medicare | 400 | 100 | 50.00 | 50.00% | 20,000 |
| HMOs | 300 | 100 | 55.00 | 55.00% | 16,500 |
| Commercial insurers | 200 | 100 | 60.00 | 60.00% | 12,000 |
| Self-pay (uninsured) | 100 | 100 | 15.00 | 15.00% | 1,500 |
| | 1000 | | | | 50,000 |
| Expenses | | | | | 30,000 |
| Profit | | | | | 20,000 |

## A CASE IN POINT

The following example illustrates how this phenomenon takes place. In the initial year, a physician provides 1,000 services to patients with a stated charge of $100 for the service. However, because of fees established by Medicare and insurance companies, the physician collects substantially less than the stated charge. The payment per unit is net of contractual allowances from Medicare and insurance companies, and bad debts, the latter representing patients who do not pay and is limited in this example to the self-pay category. The collection rate is the portion of the charge per unit that is actually paid.

The practice is budgeting for Year 2 and wants to increase physician income by 3%. Since the practice is at capacity, no additional units of services are expected to be provided. Expenses are expected to increase by 3.5%, so that the revenue target for Year 2 is $51,650, requiring a net increase of 3.3% in fees. (See table 3.)

The process of setting the new charge (which only self-pay patients pay) requires knowing or forecasting what increases will be received from insurance companies. The previous discussion indicated that Medicare fees will increase[5] by 1.5% and that historically, health insurers have given increases averaging 2%. Commercial insurers are non-HMOS which usually have smaller market share and less negotiating leverage and therefore can be expected to give, on average, slightly better increases than the HMOs. The anticipated charges are reflected in table 4, resulting in $49,550 of 2002 net revenue. The remaining $2,100 of net revenue must be made up from collections from uninsured patients. Of these, only those who lack insurance by choice and who have financial means are likely to pay a significant sum, and the historical experience is that 15% of the self-pay

4 BLS does claim to attempt to adjust for this factor to get 'real' price increases.

5 On average, and for purposes of the example, assume this practice experiences the "average."

### Table 3: Year 2 Targeted Revenue

| | | |
|---|---|---|
| Target Profit in 2002 | 103.00% | 20,600 |
| Expected expenses | 103.50% | 31,050 |
| Target net revenue in year 2 | | 51,650 |
| Net revenue in year 1 | | 50,000 |
| Average increase in net fees | | 103.30% |

category is collected. The result is that gross charges must be $14,000 for the 15% collection ratio to result in the needed revenue of $2,100, and this requires a gross charge per unit of service of $1,400, 40% higher than Year 2001. (See table 4.)

Table 5 summarizes the result of the calculations.

In a practice that is at service capacity, a relatively small increase in operating expenses—3.5% in the example—coupled with smaller percentage increases from most of its payors, must raise prices dramatically to the uninsured to stay even. One observation is that the "uninsured by choice" who have economic means are subsidizing the poor and indigent who cannot pay in any event, as well as subsidizing the discounts given to the Medicare program and HMOs.

Among the many other implications of the above example, a valuation analyst cannot rely upon a trend in the *charge* for a service, he or she must look at what is actually being *paid* for that service. In valuing collectible accounts receivable, the analyst cannot rely upon the amount shown in the receivables detail, but has to analyze the receivables by insurance category to determine how much is likely to be collected. Blindly "ballparking" a collectibility factor without looking at historical results and the age of the receivable will simply not work.

#### PAYOR MIX

Another implication—or, more accurately, conclusion—is that the financial success of a medical practice or other healthcare provider is irretrievably tied to the "payor mix" or the underlying insurance coverage (or lack thereof) of its patients. The profit margin per dollar of revenue will vary wildly from insurer to insurer and from market to market. Physician incomes tend to be higher in the South and lower in the Northeast according to MGMA data—although this can vary by specialty.

Given the facts of physician income, use of the Market Approach[6] based on revenues as a sole method of determining value cannot possibly yield an accurate result, as there is no way to know how much income/cashflow those revenues generated—and cash flow to capital or equity is what hypothetical investors buy. Even more suspect are so-called "goodwill" values based upon practice revenues matched with so-called "goodwill" percentages from the Goodwill Registry. In an industry where payor mix along with operating expenses drives profit, revenues are a weak indicator at best of cash profits.

### Table 4: Calculation of Gross Charge

| Year 2 | Units | Payment per unit 01 | Increase | Payment per unit 02 | Net Revenue |
|---|---|---|---|---|---|
| Medicare | 400 | 50.00 | 1.50% | 50.75 | 20,300 |
| HMOs | 300 | 55.00 | 2.00% | 56.10 | 16,830 |
| Commercial insurers | 200 | 60.00 | 3.50% | 62.10 | 12,420 |
| Self-pay | 100 | 15.00 | TBD | TBD | TBD |
| Expected Revenue | 1000 | | | | 49,550 |
| Target 02 net revenue | | | | | 51,650 |
| Net revenue from self-pay | 100 | | | 21 | 2,100 |
| Expected collection rate | | | | | 15.00% |
| Target Charges | | | | | 14,000 |
| Number of units | | | | | 10 |
| Target Charge per Unit | | | | | 1,400 |

#### GROWTH IN UNITS

For the discrete forecast period associated with a DCF, the analyst may find that the practice has the capacity to see additional patients or provide additional services. The growth rate during the years of the forecast in units of service provided needs to be evaluated carefully for reasonableness. Table 6 highlights the impact of various growth rate assumptions on the volume of a practice presently seeing 4,500 patient encounters per year (a typical level for an Internal Medicine practice).

With a growth rate of 4%, at the end of the Year 3, the practice is seeing more than 5,000 patients. This would be busy for an Internal Medicine practice and likely represents capacity, unless additional providers are added. If additional providers are to be added, then the analyst needs to consider the additional expenses that the practice would incur as well as the fact that practices typically lose money as new providers are added until they see sufficient patients to cover addi-

6 The Stark regulations defining Fair Market Value indicate that only transactions "in a particular market at the time of acquisition" are relevant!

### Table 5: Year 2 Revenue

| Year 2 | Units | Charge per unit | Payment per unit | Net Revenue |
|---|---|---|---|---|
| Medicare | 400 | 140 | 50.75 | 20,300 |
| HMOs | 300 | 140 | 56.10 | 16,830 |
| Commercial insurers | 200 | 140 | 62.10 | 12,420 |
| Self-pay | 100 | 140 | 21.00 | 2,100 |
| | | | | 51,650 |

tional overhead as well as their own compensation.

*Observation:* One example I encountered during a review on behalf of the acquirer of a valuation prepared on behalf of the seller was a projected 10% per annum growth rate in the first three years of a five year DCF for a primary care practice. During my site visit, I noted that the location already had a serious parking problem—there were only seven spaces and no potential for expansion.

## CONCLUSION

In light of the above discussion, what is the correct terminal growth rate for determining a capitalization rate? The reasonable range seems to be just under 2% to no more than 3% for price per unit of service. Rates larger than this require that the analyst demonstrate that the practice has the ability to continue to add capacity and patients into perpetuity.

Offering guidance as to a reasonable unit growth rate during a discrete forecast period for a specific practice is very difficult because it requires a careful analysis of the particular situation. Key to that analysis is assessing the capacity of the physicians or other providers in the practice to see more patients, as well as the capacity of the existing overhead structure to absorb more patients.

**Mark O. Dietrich, CPA/ABV, is with Dietrich & Wilson, PC, Framingham, Massachusetts. He can be contacted at dietrich@cpa.net.**

### Table 6: The Impact of Various Growth Rate Assumptions

| | Base Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|
| *Visits* | *4,500* | | | | | | | | |
| Growth Rate | 4.00% | 4,680 | 4,867 | 5,062 | 5,264 | 5,475 | 5,694 | 5,922 | 6,159 |
| Growth Rate | 5.00% | 4,725 | 4,961 | 5,209 | 5,470 | 5,743 | 6,030 | 6,332 | 6,649 |
| Growth Rate | 6.00% | 4,770 | 5,056 | 5,360 | 5,681 | 6,022 | 6,383 | 6,766 | 7,172 |
| Growth Rate | 7.00% | 4,815 | 5,152 | 5,513 | 5,899 | 6,311 | 6,753 | 7,226 | 7,732 |
| Growth Rate | 8.00% | 4,860 | 5,249 | 5,669 | 6,122 | 6,612 | 7,141 | 7,712 | 8,329 |
| Growth Rate | 9.00% | 4,905 | 5,346 | 5,828 | 6,352 | 6,924 | 7,547 | 8,226 | 8,967 |
| Growth Rate | 10.00% | 4,950 | 5,445 | 5,990 | 6,588 | 7,247 | 7,972 | 8,769 | 9,646 |

# FRAUD AWARENESS FOR VALUATION PROFESSIONALS

By Robin E. Taylor, CPA/ABV, CFE, CVA, CBA

Recent events have highlighted the subject of financial statement fraud in corporate America. Such notable companies as Enron, WorldCom, and HealthSouth have received almost constant publicity, but for the wrong reasons: allegations of fraud. Investors have suffered losses in the billions. Consequently, increased scrutiny has fallen on management, the Securities Exchange Commission (SEC), and the accounting profession. In addition, some confidence has been lost in the United States' financial markets.

Certainly, the risk associated with operations of the enterprise and the reliability of its financial statements can have a profound impact on corporate valuation. Although much of the recent publicity has focused on large public companies, financial statement fraud occurs in organizations of all sizes. Additionally, the fraud schemes used and the observable symptoms are similar regardless of company size.

Even though a valuation assignment is not an "audit" of the subject company or a formal fraud examination, the valuation analyst should not be blind to obvious signs of fraud. The analyst should carefully consider such signs and symptoms and communicate their existence to the client as is appropriate to the assignment and our professional responsibilities as CPAs. I am not suggesting an expansion of the engagement's scope or a change in its objectives, but increased awareness of the signs of fraud. Individual professionals can then determine the appropriate response to identified fraud risk factors.

The skill set of valuation professionals is highly analytical and well suited to spotting signs of fraud. Past studies, however, have shown that although CPAs are skillful in detecting these signs and symptoms (such as through the application of analytical procedures), they are often unskilled in interpreting what they see. They spot the symptoms but often cannot diagnose the disease.

### VALUATORS SHOULD CARE ABOUT DETECTING FRAUD

A valuation engagement is a consulting service, which by definition does not involve attestation services. It is not designed to find fraud. We communicate this fact to clients and the report user, protecting ourselves by our engagement letter and the limiting conditions disclosed in our valuation reports.

Regardless of the engagement's purpose, however, proper valuation often relies on identifying expected earnings capacity. Reported financial information is analyzed, inquiries and research are performed, and then the financial statements may be adjusted to move from reported earnings to normalized earnings. Certainly if the valuation analyst believes that the reported figures have been distorted through fraudulent manipulation, adjustments may be in order. This approach is

## A Fraud Detection Framework

The AICPA course "Identifying Fraudulent Financial Transactions" (a one-day course) presents four steps for detecting fraud. I highly recommend this course to those wishing to expand their skills in this area. The approach to fraud detection follows a structured process. You first have to identify the organization's fraud exposures. This involves reviewing both qualitative and quantitative factors related to management and directors, the organization's external relationships, its internal organization, industry factors, and finally, its financial characteristics.

Identifying fraud exposures is very similar to the process of understanding the company in the context of business valuation. In both, you are looking for critical risk factors. The following are examples of potential fraud exposures:

### MANAGEMENT

- Criminal history of certain management members
- High turnover of management positions
- Performance-based pay systems
- Autocratic management style

### EXTERNAL RELATIONSHIPS

- Related party transactions including large or unusual transactions and large transactions timed near the end of the year
- Unusual borrowing arrangements
- Significant receivables to payables

### INTERNAL ORGANIZATION

- New entity
- Overly complex structure

### INDUSTRY FACTORS

- Declining industry
- Type of industry
- Company performance contrary to industry's

### FINANCIAL CHARACTERISTICS

- Positive earnings but negative cash flow for extended periods
- Rapid growth
- Major account balances that are based on significant accounting estimates or complex accounting pronouncements
- Weak financial position

Next, you need to identify what fraud symptoms you would expect to see, given the fraud exposure you have identified. You then search for those symptoms and, finally, follow up on what you have observed. Such steps would be taken in a formal fraud examination and, to a great extent, in a GAAS audit (compliance with SAS No. 99).

The process is also iterative, rather than linear. Information discovered at a later "step" may cause you to reconsider earlier conclusions.

Again, one thing we do not want to do is cross over the line of converting a valuation engagement into something it was not designed to be. My caution here is that the valuation professional should not turn a blind eye to such fraud exposures and fraud symptoms when they are identified. The client at least should be informed of any troubling signs. Additionally, as indicated earlier, certain engagements may require more emphasis on suspicions of understated or overstated financial performance. This should be covered in the engagement letter for those specific assignments.

no different from that used in adjusting historical performance for unusual and nonrecurring items.

Several valuation issues we face in such situations are:

- Obtaining knowledge of the fraud and its amount (Was it reasonably knowable?)
- Determining the amount of the fraud.

Occasionally, however, we will be engaged to perform services in which the potential presence of fraud is a more direct concern in determining financial fairness or "equity." Here, the appropriate standard of value may be other than fair market value. In such cases, the assumption of possessing "reasonable knowledge of relevant facts" by "hypothetical buyers and sellers" may not be relevant. Examples of such engagements may include:

- Assisting in due diligence and pricing activities on acquisitions
- Fairness opinions
- Divorce valuations
- Damages quantification
- Minority oppression cases

Often the media focuses on situations in which an earnings overstatement is alleged. In some of the situations listed above, such as divorce, the fraudster's goal may be to understate financial performance. Management's motivations and past tendencies must be examined.

Even in other types of engagements, the CPA valuation professional should not turn a blind eye to the red flags associated with financial statement fraud. Honing our analytical skills in this area also increases opportunities to obtain other types of engagements in which we can effectively serve the client's interest.

## TYPES OF FRAUD

There are three major classes of fraud:

1. *Financial reporting fraud:* Fraud against the users of financial information
2. *Asset misappropriation:* Also known as asset theft.
3. *Corruption:* This involves such matters as bribery and kickbacks.

All three types of fraud can distort the financial statements. There also may be interplay of the fraud types in an organization. For example, an environment wherein financial reporting fraud exists or is encouraged from the top may, in turn, encourage employees at lower levels of the organization to seek opportunities for asset misappropriation.

How does this happen? Management that is actively engaged in financial reporting fraud schemes may be distracted from other internal issues. This was alleged in the case at MCI (pre WorldCom), where the focus on increasing revenues at almost any cost fostered a culture that reduced emphasis on internal controls and asset protection. As a result, a mid-level employee was able to defraud MCI and others of millions of dollars.

## FINANCIAL REPORTING FRAUD

For our purposes, this article will focus on financial reporting fraud. First, let's review some basic concepts. FASB Statement of Financial Accounting Concepts No. 1 *Objectives of Financial Reporting by Business Enterprises* states: "Financial reporting is not an end in itself but is intended to provide information that is useful in *making business and economic decisions*—for making *reasoned choices among alternative uses of scarce resources* in the conduct of business and economic activities." [Emphasis added.] Certainly, an incorrect financial statement affects the user's ability to make reasoned choices.

Accounting misstatements can be caused by *error* (the unintentional) or *fraud.* We can make errors with integrity, thank goodness! Fraud, however, reflects a lack of personal integrity. In either case, the financial statements are less useful than they should be.

According to a published study of public company financial restatements for 2003, the areas most involved in accounting misstatements were:

- Reserves and contingencies (17.5%)
- Revenue recognition (16.2%)
- Equity (15.7%)
- Capitalization of assets (10.1%)
- Inventory (5.7%)

Over the last five years, however, revenue recognition has been the leading problem area when fraud was involved.

## DEFINING FINANCIAL REPORTING FRAUD

Financial statement fraud involves *intentional* actions, misstatements, or omissions to hide or distort the real financial condition of an entity to *deceive the users. There are no accidental frauds!*

The financial statement users, for our purposes, are of two main types:

1. Those using published financials as gauges of financial strength for credit decisions, investment decisions, or internal management decisions.
2. Those using financial statements as an analytical tool for valuation assignments or fraud investigations (assisting others in determining courses of action).

Fraud can certainly be a material valuation issue to users. For example, a price/earnings (P/E) ratio of 10 to 1 mathematically means that an earnings overstatement (for reasons unknown) could cause an overstatement of market capitalization equal to 10 times the amount of the fraud (net of tax implications). Obviously, this "cold math" ignores many other factors that go into determining proper corporate valuations, but the potential valuation impact is certainly there. In addition, perceptions of fraud in the marketplace can cause investors to lose confidence even in good companies. The perceived added risk can lower market multiples and increase the demanded rate of return.

That brings up an interesting issue or two. Assume you have a valuation assignment for a minority interest in a closely held business in which the price of equity was determined using fraudulently prepared financial statements that significantly overstated net income. The presence of the fraud was unknown and reasonably unknowable to the hypothetical buyer and seller. No adjustments for the fraud were made. Would you consider the value you determined (based on earnings) to be reflective of fair market value?

A similar issue could surface when using market multiples from publicly traded companies that had significant fraud issues as of your valuation date. In hindsight, the financial performance of the public company was obviously distorted because of the fraud but the fraud was unknown to the market as of your valuation date. Is your valuation still reflective of fair market value? Those knowing the whole truth would have seen a different financial picture from that which was observable and would have used different market multiples.

Are additional valuation adjustments to the market multiples appropriate in this case? Recently, I posed this question to several top valuation experts and the consensus was that your conclusion was still at fair market value because your conclusion was based on what was known or reasonably knowable to the market participants as of the valuation date. Do you agree?

## THE CLASSIC FRAUD TRIANGLE

Frauds generally can be explained with what is called the *fraud triangle,* which has the following three "corners:"

1. Need or pressure
2. Opportunity
3. Rationalization

How do these three "corners" relate to financial statement fraud? The classic fraud triangle starts with individual motivations, such as a perceived need by or external pressures on the perpetrator. Greed is also a strong motivation. Pressures for financial statement fraud include:

- Meeting analysts' expectations
- Increasing reported profits for purposes of incentive-based compensation
- Covering management failures
- Obtaining financing or more favorable loan terms, or meeting loan covenants
- Pressures from higher levels within the organization exerted through fear, intimidation, or threats of job loss.

Opportunity arises when the perpetrator believes the fraud scheme can be successful and not be detected. Accounting systems may be extremely complex, thereby allowing the fraud to remain hidden. The perpetrator believes the system itself offers protection against discovery. Alternatively, he or she exerts pressure downward on others in the organization to hide the fraud scheme or to not question accounting or financial reporting decisions mandated from "on high."

Additionally, management may override internal controls. Sadly, management may simply attempt to fool or intimidate the auditors. For example, they may threaten the auditors with loss of the client or loss of other consulting engagements if they question explanations or seek adequate documentation.

Examples of opportunities to commit financial statement fraud include:

- Absence of proper oversights by the Board of Directors
- Weak or nonexistent internal controls
- Override of internal controls
- A corporate culture that fosters fraud (what is the ethical message that comes from top management?)
- Complex accounting rules
- Complex organizational structure
- Financial estimates requiring significant judgment.

Fraudsters have the ability to justify their actions. They do not view their acts as criminal, at least initially. Rationalizations of financial statement fraud may include:

- "Everyone else is doing it."
- "We're doing it to protect shareholder value."
- "It's just a timing issue. Future performance will cure the current problem."
- "It will never happen again."
- "We're protecting the jobs of our people and this community."

A situation in which all three elements of the fraud triangle are present creates the greatest fraud exposure. For example, despite pressures to commit the fraud, without fraud opportunities, because internal controls are strong and the corporate culture fosters integrity, fraud exposure is limited. The valuation analyst can obtain knowledge of such qualitative elements during management interviews or the site visit.

## INDUSTRY FACTORS

We also need to remember that certain industries have historically been more prone to fraudulent reporting. One study of public companies, for example, found that about 78% of reported public company financial statement frauds involved companies listed on the NASDAQ. About 15% were listed on the NYSE. Think of the nature of many of the NASDAQ companies: high-tech, telecommunications, bio-tech, start-up companies, and those experiencing rapid growth and having a high need for capital to fund growth. Such entities would naturally receive greater scrutiny.

## SELECTED FINANCIAL STATEMENT AREAS

Since we're dealing with *intent* to deceive, not *accidental* misstatements, let's review some of the strategies that continually account for the majority of intentionally misleading reporting practices:

- Reporting revenue (timing issues, bogus sales)
- Boosting income with one-time gains
- Shifting current expenses to a later or earlier period (timing)
- Capitalization policies

- Failing to disclose major liabilities—contingent or real
- Deferring current profits and using them to offset expected future losses

Another term used for some of these actions is *earnings management*. It has occurred for hundreds of years. Management can make legitimate decisions on timing, and accounting allows the use of estimates in many areas, but *not* with the intent to deceive the user.

Nothing is wrong with legitimate "earnings management" techniques, just as nothing is illegal in proper tax planning (tax avoidance v. tax evasion). Sometimes, however, financial statement fraud is hidden behind the mask of "professional judgment" in the application of accounting principles, such as the timing of revenue recognition. Generally accepted accounting principles have to be flexible to allow for differing circumstances. Overly aggressive application of accounting principles, however, can be fraudulent when there is intent to deceive users. Additionally, proving there was such "intent" remains one of the most difficult elements in winning a financial fraud case.

## Major Red Flags

Regardless of the type of organization, the presence of certain red flags should be considered in determining the potential of fraud. The following is a partial list of these flags:

- Management places undue emphasis on meeting earnings projections or other quantitative targets.
- The control environment within the company is weak.
- Management compensation depends on meeting unreasonable quantified targets set by others.
- Operating and financial decisions are dominated by a single person or a few persons.
- Management seems overly interested in complex accounting matters.
- An unusually high percentage of the booked assets are intangibles.
- Management and key accounting personnel turnover is high.
- The client's profitability is inadequate or inconsistent relative to the industry.
- There is a continuing large variance between cash flow and reported earnings.
- The client is facing adverse legal or regulatory issues.
- Conditions in the client's industry are not positive for the long term.
- The client participated in several end of year (or end of quarter) transactions that have a material effect on the financial statements. Alternatively, there are pending transactions that are viewed as critical to success.
- The client is in a period of rapid growth.
- Client growth has been fueled by continuous acquisitions.

The presence of these symptoms does not necessarily indicate that fraud exists. Their presence should, however, generate a heightened sense of awareness of fraud potentials. Remember also the critical need to synthesize all red flags observed during your review. Lifestyle and behavioral symptoms, lack of controls, and lack of proper documentation must be considered along with your analytical review of the numbers.

### REVENUE FRAUD

As we know, revenue is often the single largest item on financial statements. For right or wrong, investors weigh revenue very heavily in making decisions. The trend in revenue growth is one of the most sensitive factors in changes in the market capitalization of a company, especially high tech or "new economy" companies. During the run up of "dot com" stock prices, often no earnings were reported. Thus, the focus shifted to other valuation factors, including revenue growth.

If revenue growth is what investors want to see, there is pressure to give it to them. One analyst remarked, "The top line is the bottom line for many investors today."

In spite of all of the sophisticated accounting systems and complicated disclosures, many of the major fraud schemes remain relatively simple in their execution. Many involve simple classification issues in the statement of operations. These techniques do not change the bottom line of the company. The perpetrator, however, knows that financial statement users focus on different financial parameters in different industries. When revenue growth is a key factor to users, normal offsets to sales may be moved down to other locations on the statement of operations. Alternatively, large one-time gains from sales of certain assets or business units may be moved upward and classified as operating revenue. The "geography" (location of presentation) has simply been adjusted.

For example, sales returns may be moved to cost of sales rather than being netted against gross sales, purchase discounts may be moved to operating revenue, or gains on sales of assets are moved to operating revenue.

Other schemes may involve early revenue recognition, where revenue is booked before delivery, before right of cancellation, or before transfer of title. Early revenue recognition can be perpetrated with bill-and-hold schemes. One public company, for example, used a bill-and-hold strategy to inflate revenue by getting retailers to agree, in exchange for a discount, to purchase shipments of a company product six months before they were needed and allowing payment for them six months later. Another scheme involves booking the revenue as earned when a side agreement allows the customer to return all unsold goods.

Fictitious sales comprise frequent frauds related to revenue recognition. Sales may be recorded to fake customers or may involve fake transactions to legitimate customers who have no agreement to purchase, no knowledge of the transaction, and no intent to pay.

One unique recognition method we observed on a fraud case was that of a sales manager. He recognized the revenue on the sale of a unit when he "knew in his heart" it was a sale. I have yet to see this unique revenue method in any recognized accounting textbook.

So when is a sale a sale? According to SEC Staff Accounting Bulletin 101 on Revenue Recognition, four factors characterize a sale:

1. Persuasive evidence that an arrangement exists.
2. Delivery has occurred or services have been rendered.
3. Seller's price is fixed and determinable.
4. Collectibility is reasonably assured.

These are "common sense" factors. When commenting on the above SEC bulletin, one accounting educator lamented the need now for the SEC to promulgate the obvious.

### EXPENSE FRAUD

Expense fraud is often perpetrated though inventory overstatement, capitalization of expenses, liability omissions, and understating or overstating reserves. WorldCom, for example, is alleged to have inflated earnings by counting routine operating expenses improperly as long-term capital expenditures. This fraud reached $11 billion.

An unusual growth in the balance sheet or a changing asset mix in comparison to industry benchmarks can be symptomatic of fraud.

### FINANCIAL STATEMENT ANALYSIS

The tools of financial statement analysis for the auditor, fraud examiner and the valuation professional are similar. The level of follow up and inquiry will, however, likely differ. CPAs are familiar with the three major types of tools to be used: vertical analysis, horizontal analysis, and ratio analysis.

Both accounting accidents and accounting fraud may generate the need for financial statement adjustments in performing a valuation. Both types of situations (material error or fraud) may also exhibit the same type of analytical symptoms during financial statement analysis. Our focus, however, is not on the accidental.

### CONCLUDING COMMENTS

Fraud has always been with us and it always will be. No amount of regulation or oversight will ever eliminate it. The Sarbanes-Oxley Act provisions and SAS No. 99 are welcomed but will not put an end to financial statement fraud in public or private companies. Some people, given the opportunity and desire, will always break the rules and attempt to "fleece the sheep."

The issues of financial statement fraud are many and can be complex. Adding basic fraud awareness skills is an effective way to increase the quality of your valuation engagements and can open up additional engagement opportunities.

**Robin E. Taylor, CPA/ABV, CFE, CVA, CBA is a partner in the Birmingham, Alabama office of the regional accounting firm, Dixon Hughes PLLC. He is a co-author of *Financial Valuation: Applications and Models* (Hoboken, NJ: John Wiley & Sons). He can be contacted at rtaylor@dixon-hughes.com.**

# *In the* KNOW

## About when to use the mean, median, or both

By James R. Hitchner, CPA/ABV, ASA

Averages are often used in valuation analyses. They are also often misused. Did you know that there are three types of averages? There are the mean, the median and the mode—what I call the "three M's." The mean is the sum of the observations divided by the number of observations. The median is the number in the middle that has as many observations above as below. This works just fine when you have an odd number of observations. For an even number of observations, you take the mean average of the two middle numbers; that is the midpoint or median. The mode is the number that appears most frequently. Generally, in the valuation world, only mean and median averages are used.

### DECIDING WHICH TO USE

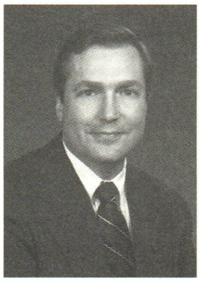
Now on to the real question. Should you use a mean, median, or both? Well, it depends. Some analysts decide ahead of time to go with just the mean or median. Others calculate both and then make a decision as to which to rely upon. Of course, this assumes that an average is appropriate, which is not always the case. Sometimes individual observations are given more weight than an average. Assuming an average is appropriate or desired, some analysts will calculate both and compare them. If they are close there is not an issue. But what if they are different? Typically, if the median is higher than the mean, there may be outliers in the mean calculation causing a downward bias. If the mean is higher, there may be outliers causing an upward bias. Using a median assists in reducing the effect of outliers. That is why many analysts prefer this type of average. Well, there you have it—a simple but important concept to consider in preparing credible valuation conclusions.

**James R. Hitchner, CPA/ABV, ASA, is with the Financial Valuation Group, Atlanta, Georgia. He can be contacted at jhitchner@fvginternational.com.**

# A FORMIDABLE FOURSOME

*Four ABV credential holders have been honored by the AICPA. Among them, the first woman to be inducted into the AICPA BV Hall of Fame.*

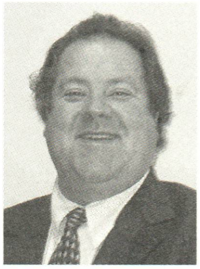
Four AICPA members were honored at the AICPA National Business Valuation Conference in Orlando, Florida, November 7–9, 2004. All honorees are holders of the AICPA's Accredited in Business Valuation (ABV) credential.


Harold Martin

## VOLUNTEERS OF THE YEAR

The BV Volunteer of the Year Award recognizes CPAs who have advanced the ABV Credential and business valuation profession for CPAs through their extraordinary service as a member of an AICPA committee, subcommittee, or task force. This year, Harold Martin and Ron Seigneur were honored for their commitment and service as Volunteers of the Year. Harold Martin, CPA/ABV, ASA, CFE, is a principal with Keiter, Stephens, Hurst, Gary & Shreaves, PC, Glen Allen, Virginia. He has served as editor of the AICPA *ABV E-Valuation Alert* since its inception in 1999 and he is an editorial adviser to *CPA Expert.* He is also a member of the AICPA Task Force on valuation of pass-through entities and of the Appraisal Standards Board USPAP Task Force.

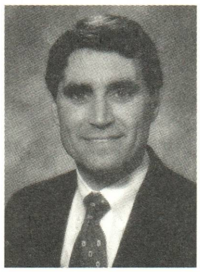
Ron Seigneur, CPA/ABV, CVA, is a partner with Seigneur Gustafson Knight, LLP, Lakewood, Colorado. He is recognized nationally as a consultant to law firms on valuation and practice management issues and as an instructor and author on business valuation, leadership and professional firm management. In 2001, he was inducted as a Fellow into the College of Law Practice Management.


Ron Seigneur

He has been a featured speaker at AICPA conferences and at conferences sponsored by the National Association of Certified Valuation Analysts, as well as state bar associations, state CPA societies, and the Environmental Protection Agency.

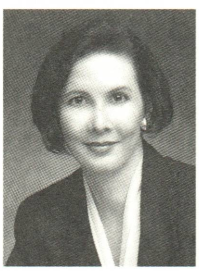
## HALL OF FAME

Induction into the BV Hall of Fame recognizes CPAs whose lifetime achievements and contributions have significantly advanced the business valuation discipline. This year's inductees are Tom Hilton and Eva Lang.


Tom Hilton

Tom Hilton, CPA/ABV, ASA, CVA, is a partner with Anders, Minkler & Diehl LLP, St. Louis Missouri. He is recent past chair of the AICPA Business Valuation Committee and is currently, a member of the AICPA Business Valuation, Forensic & Litigation Services Executive Committee. He has also been involved with numerous boards and committees of the AICPA and other organizations.

Eva Lang, CPA/ABV, ASA, is executive director of the Financial Consulting Group. She is the first woman to be inducted into the BV Hall of Fame.


Eva Lang

Ms. Lang is a nationally recognized expert on electronic research for business valuation and litigation support services. She speaks frequently to national groups on technology issues and is a contributing editor to *CPA Expert.* She writes a "Web Site of the Month" column for the AICPA *ABV E-Valuation Alert* and she is a co-author of *The Best Web sites for Financial Professional* published by John Wiley & Sons (Hoboken, New Jersey). In addition, Ms. Lang has served on the AICPA Business Valuation and Appraisal Subcommittee, as well as CPA committees at the state level in the areas of estate planning, litigation services, and management consulting services.

## BV Standards and the New BV/FLS Web Site

**Proposed AICPA Business Valuation Standards and the new BV/FLS community Web site (www.aicpa.org/BVFLS) were among the topics covered at the AICPA National Business Valuation Conference in Orlando, Florida, November 7–9, 2004. A preliminary draft of the proposed BV standards was presented to and discussed with the members in attendance. Members will be apprised of when the standards are issued as a public exposure draft for their comments.**

**The benefits and richness of the new Web site were also discussed and demonstrated. But see for yourself; go to www.aicpa.org/BVFLS.**

## Upcoming ABV Exam

**More than 100 practitioners took the examination for the Accredited in Business Valuation credential, which was administered between November 15 and 30. The next exam is scheduled for June 20–25, 2005. Registration for the June exam opened on December 1 and will remain open until some time in April. For more information, visit www.aicpa.org/BVFLS/events. This site offers access to information on the ABV application process and the ABV competency assessment tool, as well as on the exam registration process.**

# FYI...

## NEW GUIDANCE FOR INTERPRETATION 101-3: *NONATTEST SERVICES*

As of December 31, 2004, practitioners will be required to document in writing the understanding established with the client under General Requirement No. 3 of Interpretation 101-3, *Nonattest Services*. The AICPA has continually updated its Web site with new information for firms seeking clarification on how to comply. Keep watching the Web site, www.aicpa.org/members/div/ethics/intr_101-3.htm, for a competency white paper and representation and engagement letter examples, which are expected soon. Both should greatly assist firms with Interpretation 101-3.

If you have questions, issues, or concerns not addressed at the site, send an email to ethics@aicpa.org.

## APPLICATION PROCESS BEGINS FOR COMMITTEE SERVICE

*May 1, 2005 is the deadline for applying to serve during the next committee year (October 2005–October 2006).*

Members interested in contributing to their profession and networking with their peers have the opportunity to do so by applying to serve on an AICPA committee or panel in the next committee year (October 2005–October 2006). This year there are several new committees and panels to choose. To avoid conflicts with tax season, the application period is open until May 1, 2005. You can apply online: Go to volunteers.aicpa.org to complete a brief Web-based application. Address inquiries to David Ray at 212-596-6030 or dray@aicpa.org.

### Much to Our Regret

**Because of a previous commitment of Jim Hitchner, CPA Expert can not publish the succeeding parts of his article, "Cost of Capital Controversies," which appeared in the Fall 2004 issue.**

**Although this is our loss, readers can still gain the benefits of Jim's insights: The succeeding parts of the article will appear in upcoming issues of Shannon Pratt's *Business Valuation Update.***

AICPA
Harborside Financial Center
201 Plaza Three
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